

**CD80 Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF3050a****Specification**

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**CD80 Antibody (internal region) - Product Information**

Application	WB, E
Primary Accession	<a href="#">P33681</a>
Other Accession	<a href="#">NP_005182.1</a> , <a href="#">941</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	33048

**CD80 Antibody (internal region) - Additional Information****Gene ID** 941**Other Names**

T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B7.1, B7, CD80, CD80, CD28LG, CD28LG1, LAB7

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD80 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD80 Antibody (internal region) - Protein Information****Name** CD80**Synonyms** CD28LG, CD28LG1, LAB7**Function**

Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important

role in T-lymphocyte activation (PubMed:<a href="http://www.uniprot.org/citations/38467718" target="\_blank">38467718</a>). Acts as the primary auxiliary signal augmenting the MHC/TCR signal in naive T-cells together with the CD28 receptor which is constitutively expressed on the cell surface of T-cells (PubMed:<a href="http://www.uniprot.org/citations/12196291" target="\_blank">12196291</a>). In turn, activates different signaling pathways such as NF-kappa-B or MAPK leading to the production of different cytokines (PubMed:<a href="http://www.uniprot.org/citations/10438913" target="\_blank">10438913</a>). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/12121659" target="\_blank">12121659</a>). Also acts as a regulator of PDL1/PDCD1 interactions to limit excess engagement of PDL1 and its inhibitory role in immune responses (PubMed:<a href="http://www.uniprot.org/citations/36727298" target="\_blank">36727298</a>). Expressed on B-cells, plays a critical role in regulating interactions between B-cells and T-cells in both early and late germinal center responses, which are crucial for the generation of effective humoral immune responses (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

Expressed on activated B-cells, macrophages and dendritic cells

### **CD80 Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **CD80 Antibody (internal region) - Images**



AF3050a (1 µg/ml) staining of Lymph Node lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**CD80 Antibody (internal region) - References**

T cell-encoded CD80 and 4-1BBL induce auto- and transcostimulation, resulting in potent tumor rejection. Stephan MT, Ponomarev V, Brentjens RJ, Chang AH, Dobrenkov KV, Heller G, Sadelain M, Nature medicine 2007 Dec 13 (12): 1440-9. PMID: 18026115